

REMARKS

Claims 1 – 25 are pending and rejected.

The applicants amend claims 1 – 6, 9, 10, 14 – 16, 18 – 22 and 24, and respectfully assert that claims 1 – 25, as amended, are in condition for allowance for at least the reasons discussed below.

Rejection against Claims 1 – 14

The applicants respectfully assert that claim 1, as amended, is patentable over U.S. Patent 6,965,076 (Wu) at least because Wu fails to disclose a node support located in a second cavity.

The applicants' claim 1, as amended, recites in part:

A keyboard enclosure comprising:

a first cavity in which a circuit can be disposed;

a region forming a second cavity; and

a node support located in the second cavity.

For example, as shown in FIGS. 2 and 3 and discussed in paragraphs 12 – 15, an enclosure 52 includes a first cavity in which a switch-membrane assembly 68 having a circuit 60 is disposed. The circuit 60 includes a first node 74 and a second node 56. The enclosure 52 also includes a second cavity 58 and a node support 54 that is located in the second cavity. With the node support 54 located in the second cavity, the keyboard that the enclosure is a component of does not need a plate 14 (in FIG. 1) to support circuit nodes that lie over the second cavity when the switch-membrane assembly 68 is disposed in the first cavity.

In contrast, Wu appears to disclose an upper enclosure and a lower enclosure for a keyboard. The upper enclosure appears to have a cavity in which are disposed components that hold and actuate the keys to the keyboard. The cavity of the upper enclosure does not appear to have a circuit disposed in it. The lower enclosure appears to include a cavity in which an electrical-circuitry membrane having a circuit is disposed, but appears to not include another cavity. Therefore, unlike the applicants' keyboard enclosure, Wu's keyboard enclosure does not include a node support located in a second cavity.

Claims 2 – 14, as amended, are patentable at least by virtue of their dependencies on amended claim 1.

Rejection against Claims 15 – 18

The applicants respectfully assert that claim 15, as amended, is patentable over Wu and U.S. Patent 5,865,546 (Ganthier) at least because Wu and Ganthier each fails to disclose a node support located in a cavity of a region that stiffens a lower enclosure.

The applicants' claim 15, as amended, recites in part:

A keyboard comprising:

a plurality of keys, each movable relative to the other keys;
a switch membrane assembly including a plurality of circuits each having a first node and a second node both of which correspond to a respective one of the keys, wherein each circuit is operable to generate a signal when the key corresponding to the circuit's first and second nodes causes the first and second nodes to contact each other;

a lower enclosure including:

a region forming a cavity and operable to stiffen the lower enclosure, and

a node support located in the cavity and operable to support one or more of the nodes of the switch membrane assembly.

For example, as shown in FIGS. 2 and 3 and discussed in paragraphs 12 – 15, the keyboard 50 includes a switch-membrane assembly 68, keys 62, and a lower enclosure 52 in which the switch-membrane assembly 68 is disposed. The switch-membrane assembly 68 has a plurality of circuits 60 each including a first node 74 and a second node 56 that correspond to one of the keys. The lower enclosure 52 includes a cavity 58 and a node support 54 located in the cavity. The node support 54 supports the second node 56 that lies over the cavity when a key 62 that also lies over the cavity exerts pressure on the first node 74 to cause the respective first and second nodes to contact each.

In contrast and as the examiner admits on page 8 of the office action, Wu's keyboard enclosure does not include a region forming a cavity and operable to stiffen the enclosure, and a node support located in the cavity and operable to support one or more of the nodes of the switch membrane assembly.

Also in contrast, Ganthier appears to disclose a modular keyboard assembly 100 (FIG. 1) that includes a keyboard module 130 (FIG. 1) insertable into a recessed opening 104 (FIG. 1). The keyboard module 130 includes a connector 136 (FIG. 2) that contacts a connector 105 (FIG. 1) in the opening 104 to permit signals generated by the keys of the keyboard module 130 to travel through the modular assembly 100 to computer processing circuitry in the chassis 205 (FIG. 4). The connector 105 is not equivalent to the applicants' node recited in claim 15 because the keys of the keyboard module 130 do not cause the connector 105 to contact the connector 136 when the key is moved. In addition, the modular keyboard assembly 100 does not include a component that supports a node of a switch-membrane that generates a signal when a key causes two respective nodes of the membrane to contact each other. Therefore, unlike the applicants' keyboard enclosure, Gantier's modular keyboard assembly 100 does not include a node support located in a second cavity.

Claims 16 – 18, as amended, are patentable at least by virtue of their dependencies on amended claim 15.

Rejection against Claim 19

Claim 19, as amended, is patentable over Wu and Ganthier at least for reasons similar to those recited above in support of amended claim 15 over Wu and Ganthier.

Rejection against Claims 20 – 23

Claim 20, as amended, is patentable over Wu and Ganthier at least for reasons similar to those recited above in support of amended claim 15 over Wu and Ganthier.

Claims 21 – 23, as amended, are patentable at least by virtue of their dependencies on amended claim 20.

Rejection against Claims 24 and 25

Claim 24, as amended, is patentable over Wu and Ganthier at least for reasons similar to those recited above in support of amended claim 15 over Wu and Ganthier.

The applicants respectfully disagree with the examiner's assertion that claim 24 is directed to non-statutory subject matter. Claim 24 recites a method for generating a signal; claim 24 does not recite the signal itself. Therefore, claim 24 is directed to statutory subject matter.

Claim 25 is patentable at least by virtue of its dependency on amended claim 24.

Conclusion

The applicants respectfully requests that the examiner withdraw the rejections against claims 1 – 25 and issue an allowance for claims 1 – 25, as amended.

If, after considering this response, the examiner believes the claims should not be allowed, the applicants' attorney respectfully requests that before issuing an Office Action, the examiner call Mr. Janeway (425-455- 5575) to schedule a telephone conference to further the prosecution of the claims.

The Commissioner is hereby authorized to charge, at any time during the pendency of this application, any required fees or credit any overpayment to Deposit Account 08-2025 pursuant to 37 C.F.R. §1.25.

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